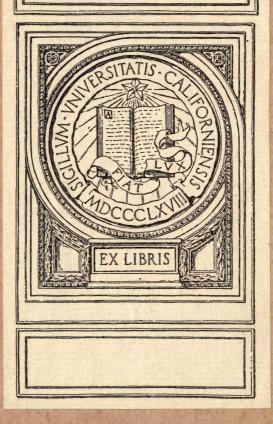
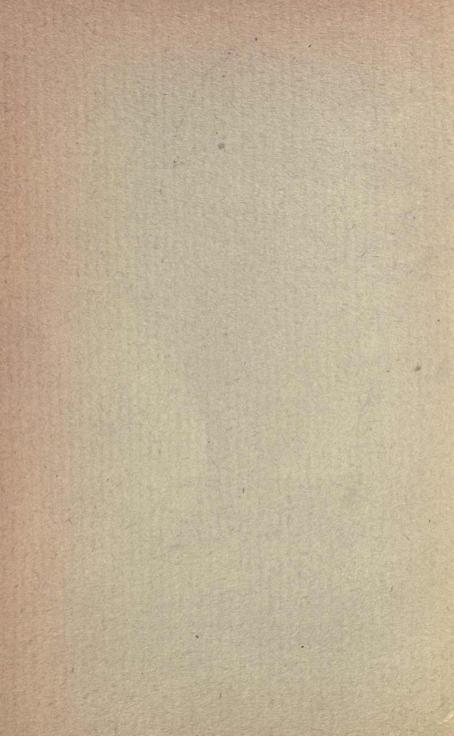
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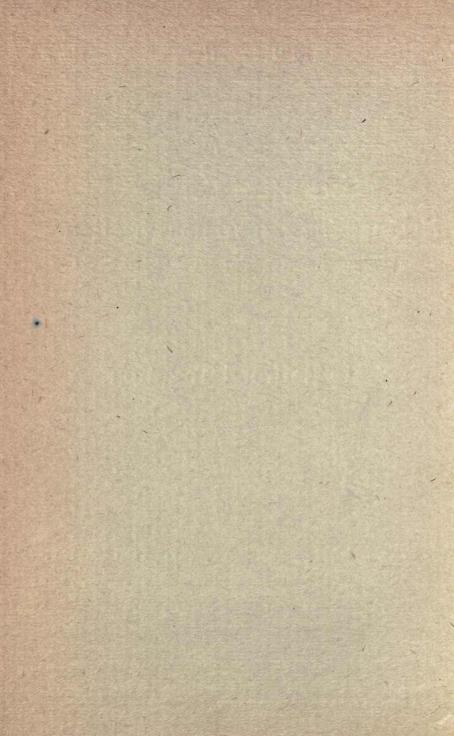
State Railroad Taxation

AMES. IOWA

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STATE RAILROAD TAXATION

The amount of taxes paid by railroads of the United States during the fiscal year of 1903 was, according to the reports of the interstate commerce commission, \$57,797,737, an increase over the amounts paid in 1902 of \$11,089,902, and it seems, that no matter in what light we view the assessment and collection of these taxes, the problem is a fundamental one.

A survey of the methods of assessment, levy, and collection of these taxes as practiced in the different states reveals the fact of confusion, and uncertainty, not only with the agencies of government, in trying to overcome the liability and incentive to tax evasion, but to the railroads themselves because of being liable to double taxation in many instances.

Not only is a line of railroad crossing state boundaries liable to taxation from two different and possibly entirely unsympathetic systems, but the minor civil divisions and municipalities of one commonwealth, under our present system, exercise an independence in administration which occasions yet further confusion and uncertainty.

Railroad property was not originally taxed differently from other kinds of property. Its peculiarities, its methods of capitalzaition and its significances from a social or industrial point of view were not early recognized, or if so, were not deemed of importance sufficient to warrant different treatment from that of general property. The State of Pennsylvania perhaps presenting the only exception in having differentiated its treatment of railroads from the start.

The true history of railway taxation begins with the application of the general property tax to the railway corporations, which tax was administered by the local officials. The method of taxation of general property, according to the value thereof, as assessed by local officials, being in force at the time railways were first constructed, was consequently applied to railways and although inadequate to reach the real taxable capacity of these corporations the practice is still in vogue in many states. Rhode Island is a conspicuous example of the operation of the general

tax system, for in that state there is no distinction between railroad corporations, or in fact any corporation, and the individual for purposes of taxation. The same, in general, was true of Louisiana at the beginning of the decade, although unlike Rhode Island, there were special statutes upon the subject. The effect of these statutes, however, was not such as to render the taxation of corporations different from the taxation of other properties.

The principles of local self government have become so firmly fixed that they are a real hindrance to a proper adjustment of the laws of taxation. The paramount thought running through these principles of local self government is, that as all persons and property within the jurisdiction of a town or county must come under the protection of their authorities, so must the corresponding rights of taxation of such persons or property be controlled by these authorities in order to be able to afford such protection. The power to locally tax any article or species of property once acquired, is reluctantly given up and there are many advocates of the right of local taxation applied to every species of property without regard to its possible complex or interstate character. In fact this local self government is so strong in some of the states that there still exists the local taxation of some parts of railroad property actually used in their operation as common carriers.

The opposition to giving up their local sources of revenue has been so strong that it has blocked the attempts to secure methods of taxation along more scientific lines and has prevented the severing of corporation taxation from the general property tax on real estate and tangible personality. The strong disinclination of legislators to antagonize local interests and to do anything which would tend to disrupt the established order of things has led them, in many cases, to permit local taxing districts to maintain their hold on property which they have become accustomed to tax, and to cover the whole field by laws of special enactment, taxing franchises, gross earnings, stocks and bonds, etc., and aiming in this manner to impose taxes equivalent to the burden which the railroads ought in justice to bear.

Instead of tearing the whole structure of the old method out by its roots and establishing a new and comprehensive system they have, by a process of grafting and patchwork, produced an exhibit on the whole confused and chaotic and one which is alike unsatisfactory to both the agencies of government and the rail-

roads themselves.

There is, however, a seeming uniformity of method among the different states in subjecting all real estate, not connected with the railroad track, or necessary to the railway operations as common carriers, to local assessment in the taxation district where located, the same as the property of individuals.

The total inadequacy of the general property tax, as locally assessed, in reaching the full taxable value of corporate bodies, when applied to them, seems to have become gradually recognized and as other elements in corporate organization presenting additional value, appeared, they were eagerly seized upon for tax-

ation purposes to make up this deficiency.

The most important of these elements was the franchise, and here we are brought face to face with the question, What is a franchise? Blackstone defines it, in terms rather vague for our purpose, as "A royal privilege or branch of the King's prerogative subsisting in the hands of a subject." The United States Supreme Court has handed down this definition: "A franchise is a right, privilege or power of public concern which ought not to be exercised by private individuals at their mere will and pleasure; but which should be reserved for public control and administration, either by the government directly or by public agents acting under such conditions and regulations as the government may impose in the public interest and for the public security."

The general use of the term franchise seems to indicate that this definition is rather narrow as there is a common tendency to grant the franchise privilege to strictly private corporations rather more often than to the interests of public control. The franchise then, we conclude, is the right to be a corporation, to acquire and possess property, to take the lands of private citizens by the sovereign right of emminent domain for corporation use upon the payment of just compensation therefor, and to fix and collect charges for the transportation of traffic. Under this definition the franchise tax would become a tax on the privilege of doing business, and not a tax on property, and it has been so held and sustained by the courts, thereby avoiding the constitutional provisions, as found in nearly every state, requiring uniformity or equal and proportionate taxation of property. The origin of the franchise tax is plainly traceable to the insufficiency and evils of the general property tax as applied to corporations.

The definitions of a franchise, of what it really consists, and how its values shall be measured and set out are points of variance between the different states and a presentation of the questions relating to the taxation of franchises is outside the scope of this paper. It is sufficient for the purpose that there is no common standard of valuation acceptable to the different states. The laws governing the valuation, while often of the same general tone and scope, have received different judicial interpretations and construction so that state statutes, even in the same language, have often wide difference in important particulars of their administration.

While a detailed description of the laws of State Railroad taxation is entirely outside the field of this paper, attention is respectfully called to the concise description of the taxation laws of each state and territory arranged and published by the Interstate Commerce Commission under the head of "Railways in the United States in 1902, Part V." This report is exhaustive and is arranged for each state on a uniform plan so that any particular fact for any state may be easily ascertained, side references to the constitution and codes being given in each case.

In order to give the clearest idea of the amounts and nature of the taxes paid by the railroads of the United States, the folloing extracts and tables are taken from the "Statistics of Railways in the United States in 1903."

TAXES.

"The interest which centers in the general question of railway taxation, both from the corporate and the public point of view, warrants the continuance of the table which shows the amount of taxes collected from railways in each state. The amount permile of line, as well as the aggregate amount, is given in each case.

SUMMARY SHOWING TAXES AND ASSESSMENTS OF THE RAILWAYS IN THE UNITED STATES, BY STATES AND TERRITORIES, FOR THE YEAR ENDING JUNE 30 1903

ENDING JU	N E 30, 1903.	
State or Territory	Amount	Per Mile of Line
Alabama	\$ 783,389	\$186
Arkansas		167
California	1,588,860	281
Colorado	1,357,464	285
Connecticut	1,050,222	1,025
Delaware	99,319	296
Florida	472,132	148
Georgia	700,601	122
Idaho	328,884	227
Illinois	4,656,633	410
Indiana	2,947,897	437
Iowa		182
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State or Territory	Amount	Per Mile of Line
Kansas		251
Kentucky	1,180,290	379
Louisiana		257
Maine		208
Maryland	467,669	353
Massachusetts		1,413
Michigan	2,398,437	296
Minnesota	:. 2,144,872	296
Mississippi	538,138	181
Missouri	1,474,185	206
Montana	667,453	208
Nebraska		199
Nevada	217,246	231
New Hampshire	402,864	327
New Jersey	1,684,077	768
New York	4,945,811	604
North Carolina		128
North Dakota	640,482	210
Ohio		426
Oregon		171
Pennsylvania	4,572,166	447
Rhode Island	189,435	894
South Carolina	455,906	150
South Dakota	298,093	100
Tennessee	770,218	245
Texas	1,179,190	108
Utah	372,296	235
Vermont		142
Virginia	808,280	216
Washington	747,556	248
West Virginia	520,557	227
Wisconsin		284
Wyoming	. 174,973	141
Arizona	197,437	125
District of Columbia	31,257	1,003
Indian Territory	15,712	8
New Mexico	258,674	118
Oklahoma	. 270,994	146
Total	(1)57,797,737	290

⁽¹⁾ Excludes \$51,832 paid in the Dominion of Canada; \$9,157 internal revenue not localized by states and territories; \$409 "On the value of real and personal property," paid directly to the United States government, and \$5,156 not distributed by states.

Certain remarkable changes are observed, if one compares the amounts paid per mile of line in the same States for the two years in question. The following States and Territories show a falling off in the rate of taxation per mile of line: Alabama, Arkansas, Delaware, Idaho, Illinois, Indiana, Nebraska, New Jersey, New York, North Carolina, South Carolina, Texas, Vermont, Indian Territory, and New Mexico. All the other States and Territories with the exception of Kansas, North Dakota and Wyoming, where the payment is the same as for the previous year, show an increase in the tax payment per mile of line. The more important increases are the following: District of Columbia, \$446; Michigan, \$106; Kentucky, \$83; Montana, \$79; Ohio, \$72; Maryland, \$69; Mississippi, \$51; Minnesota, \$49; Nevada, \$38; California, \$34; Washington, \$33; Arizona, \$33; Utah, \$29; Wisconsin, \$25; and other States a less amount. The increased payment for taxes per mile of line in the entire country was \$16, being \$274 in the fiscal year 1902 and \$290 in 1903.

The next summary presents a classification of railway taxes by States and Territories. Especial care has been taken to secure a uniform interpretation of the kinds of taxes designated, and the information submitted throws considerable light upon this diffi-

cult subject.

ANALYSIS OF TAXES BY STATES AND TERRITORIES, SHOWING THE BASIS OF PAYMENTS ACCORDING TO THE VARIOUS LAWS UNDER WHICH RAILWAYS ARE TAXED.

	AD VALQI	REM TAX		SPECIFIC TA	X
STATE OR TERRITORY	On the Value of Real and Per- sonal Property	On the Value of Stocks or Bonds or on Valuation Based on Earnings, D vi- dends or Other Re- sults of Operation	On Stocks, Bonds, Loans, Etc.	On Gross or Net Earnings, Revenue or Dividends	On Traffic or Some Phy- sical Quality of Property Operated or on Privilege
Alabama	\$ 756,662	\$	\$	\$ 14,871	\$ 5,604
Arkansas California	546,996 1,486,358	80			ere.
Colorado	1,351,197	00	375		675
Connecticut:	33.946	1,016,276	010		
Delaware	18,754	500			78,326
Florida	472,085				
Georgia	677,146			1,523	
Idaho Illinois	327,846			1 000 051	
Illinois Indiana	3,572,218 2,907,633			1,026,651	
Iowa	1,717,049		TO THE AREA OF	Storage Partiett	
Kansas	2,196,900			THE STREET	
Kentucky	845,751	333,356			
Louisiana	697,404	THE THE PARTY		200 040	10,917
Maine (1) Maryland	60,968 123,771		2.000	328,348	950
Maryland Massachusetts	1.153.358	1,658,385	3,960	311,637 21,593	258
Michigan	€98,264	1,000,000	ALCOHOLD THE	1,676,810	
Minnesota	32,348			2,102,439	
Mississippi	467,225				70,539
Missouri	1,471,871	Carried States			1,000
Montana Nebraska	667,453				The Control of the
Nevada	1,149,861 206,589				
New Hampshire	390,047				
New Jersey	1,168,369	449,457			3,690
New York (2)	4,168,369	404,634	18,400	259,898	5,095
North Carolina	457,308				16,318
North Dakota Chio (3)	640,482		100	1 000 045	00
Oregon	2,578,028 266,529		100	1,008,045	98 405
Pennsylvania (4).	690,298		382,164	697,392	190
Rhode Island	188,116		000,200	001,002	
South Carolina	445,931	AC WILLIAM			2,520
South Dakota	298,093	THE RULE WAS			44.054
Γ ennessee Γ exas (5)	758,347 1,083,062		9 970	09.003	11,871
Utah	368,470		2,270	92,092	115
Vermont	136		849	142,242	
Virginia	765,905			35,841	1,376
Washington	745,830				
West Virginia	495,388		12,249	4 000 000	21
Wisconsin Wyoming	27,438 174,898			1,836,065	1,867
Arizona	196,221				
District of Col	27,428			903	
Indian Territory.	174,898		Charles and a second		73
New Mexico	196,221				
Oklahoma	270,994	AS COMPANY OF		The Art and the	
Total (6)	\$40,120,149	\$6,397,331	\$420,367	\$9,559,350	\$210,958

⁽¹⁾ Excludes \$121, unclassified. (2) Excludes \$2,479, unclassified. (3) Excludes \$702, unclassified. (4) Excludes \$745, unclassified. (5) Excludes \$539, unclassified. (6) Excludes \$56,418, as follows: \$37,110 paid in Dominion of Canada; \$9,157 internal revenue, not localized by States and Territories; \$409, "Cn the value of real and personal property," paid directly to the United States Government \$5,156, not distributed by States; and \$4,586, unclassified.

ANALYSIS OF TAXES, BY STATES AND TERRITORIES, SHCWING THE BASIS OF PAYMENTS ACCORDING TO THE VARIOUS LAWS UNDER WHICH RAILWAYS ARE TAXED. (Cont'd).

labama rkansas alifornia olorado olorado olorado eergia daho lllinois ndiana owa cansas centucky ouisiana faine faryland fassachusetts fichigan finnesota fississippi fisotora fioraska eevada elalirada eeraska eevada	\$ 6,256 100,474 5,892	1,273
Alifornia Colorado Connecticut Delaware Clorida Georgia Georgi	100,474 5,892	1,273
Alifornia Colorado Connecticut Delaware Clorida Georgia Georgi	5,892	1,273
olorado connecticut belaware lorida teorgia daho Illnois ndiana owa Cansas Centucky ouisiana faine faryland flassachusetts lichigan linnesota lississippi lissouri fontana	5,892	2,000
Yonnecticut Delaware Plorida daho Ilinois ndiana owa Cansas Centucky ouisiana faine Iaryland fassachusetts fiichigan Iinsesota fiississippi Iissouri Iontana eebraska	第二首员出版	
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lorida leorgia daho lilnois ndiana owa Cansas Centucky ouisiana faine Iaryland Idssachusetts lichigan linnesota lississippi Issouri Iontana leoraska	1.739	
eorgia daho llinois ndiana owa Cansas Centucky ouisiana faine laryland fassachusetts lichigan linnesota lississippi lissouri fontana eebraska	47	
daho Illinois Indiana owa Cansas Centucky ouisiana taine faryland fassachusetts Iichigan Iinnesota Iississippi Iissouri fontana ebraska	21.932	
Ilinois Indiana owa Cansas Centucky ouisiana Idaine Idaryland Idassachusetts Iichigan Iinnesota Iississippi Iissouri Iontana eebraska	1.038	
ndiana owa Cansas Centucky ouisiana Caine Caryland Cassachusetts Colinesota Cississippi Contana Contana Cebraska	57,428	336
owa Cansas Centucky ouisiana faine faryland fassachusetts fichigan finnesota fississippi fissouri fontana ebraska	40.197	050
Ansas Lentucky ouisiana laine laryland lassachusetts lichigan linnesota lississippi lissouri lontana lebraska	2,605	
Centucky ouisiana taine faryland fassachusetts flichigan flinnesota flississippi flissouri fontana ebraska	236	
ouisiana faine faryland fassachusetts lichigan finnesota fississippi fissouri fontana ebraska	1.182	
laine Iaryland Iassachusetts Iichigan Iinnesota Iississippi Iissouri Iontana Iebraska	1,182	
Iaryland Iassachusetts Iichigan Iinnesota Iississippi Iissouri Iontana Ebraska	14.754	
fassachusetts lichigan linnesota lississippi lissouri lontana		10
lichigan linesota fississippi fissouri fontana febraska	28,031	12
finnesota fississippi fissouri fontana ebraska	124,245	101
lississippi lissouri Iontana Jebraska	23,262	101
Iissouri Iontana Jebraska	10,061	24
Iontana Jebraska	374	
lebraska	1,310	
evada	2,462	
	10,657	
lew Hampshire	12,817	
lew Jersey	61,241	1,020
lew York	84,610	2,326
North Carolina	• 2,050	762
Jorth Dakota		
hio	126,628	39
regon	7,227	
ennsylvania	264,964	1,770
thode Island	1,319	
outh Carolina	6,930	525
outh Dakota		
ennessee		
exas	107	1,005
tah	3,826	
ermont	2.852	28
irginia	5.158	
Washington	1.726	
Vest Virginia	12.899	
Visconsin	22,005	
Vyoming	75	
rizona	1.211	5
Dist. of Col		
ndian Ter	2,387	
	2,387	
klahoma		
Total	2,387	4

The appearance of small amounts in certain columns of the above summary may indicate a failure on the part of some of the reporting carriers to interpret the laws under which they pay taxes in conformity with the principles of classification prescribed, but in the majority of cases they indicate some peculiarity in the conditions of the charter, either of the carrier or of the municipality in which the property of the carrier lies. In making use of the above summary, these small amounts may safely be considered as representing exceptions to the established rules of taxation in the states where they occur.

The methods and combinations of methods of taxing operated railroad property, now in force in the several states, are strikingly exhibited in the last table. The general classification of ad valorem taxation of real and personal property in the first column and upon the value of stocks or bonds earnings and other results of operation in the second column, does not disclose the various provisions of the laws which produce the results of the table.

The ad valorem tax or tax on the value of the whole or some part of the real and personal property of the railroads prevails in every state and territory, including the District of Columbia, with the exception of Vermont.

The specific tax on gross or net earnings, revenue or dividends, in connection with the property tax exists in fifteen states and the District of Columbia.

The specific tax on earnings is the exclusive tax on property employed in Railroad operation in the states of Illinois, Maine, Massachusetts, Michigan, Minnesota, Ohio, Vermont, and constitutes the largest parts of Wisconsin, Maryland and Virginia. The report of the Wisconsin State Tax Commission for 1903 discusses similar tables to these given above quite thoroughly and I quote in substance from that report as follows:

The placing of nearly all the states in the first column of the table or in the ad valorem list does not mean that they rely entirely on the old methods of valuation, nor prove a lack of development toward efficiency in the matter of railway taxation. A careful analysis will show the general tendency toward placing the power of valuation in the hands of a central board, although various methods exist.

The general property tax gave good results, and was fairly well suited to the existing conditions when corporations were more or less of a local nature, as they were prior to the Civil War, but the consolidation of the smaller local companies into large sys-

tems and trunk lines, which commenced soon after the close of the war, clearly demonstrated the inadequacy of the general property tax as applied to the corporations.

Any departure from the old plan of assessment according to valuation must not be attributed to a changed attitude on the question of the taxation of corporate property on the same basis of valuation as that of individuals; but rather to the transfer of the power to boards having a wider jurisdiction. The trend is toward creating new administrative methods adapted to and capable of determining the valuation of corporate property and transportation companies with greater accuracy.

The result of this development has been to establish methods for railway taxation which are materially different in operation than those employed in the taxation of individuals and most other corporations, and the system or method which has come into most general use is the vesting of the power of valuation in state boards whose powers are sufficiently broad to require reports, examine books, and otherwise obtain information necessary for the fixing of such valuations. The property tax principle is the basis of this method in most states although the mode of procedure often varies, as where the entire property is valued in some instances as against the valuation of only a part, such as the franchises after deducting the real estate, rolling stock, etc., but in the main the provisions are essentially the same.

Roswell C. McCrea, in his report prepared under the direction of the Industrial Commission, clearly outlines the property tax as administered by state boards or officers as follows:

"This (the property tax) is the most common method of taxing transportation companies. In a few cases it is subject to purely local administration, but in most of the states valuations are made by state boards or officials. The workings of the latter method, though not in detail identical in any two of the states, coincide in some such general characteristics as the following: Certain designated officials of the various railroad companies are required to return sworn statements or schedules to state officials, setting forth in detail the length of line with all its tracks, and the proportion thereof in each tax district of the state, all personal property of every kind, all rolling stock, and often a detailed description of the construction of track and roadbed, the time spent in that construction, and the value of materials employed. There is also required a full statement of all real estate owned or used in each tax district; of all stations, houses or other build-

ings, and all equipment connected therewith; of the amount of capital stock, including its market value, or if there is no market value, the actual value of the shares, in some cases including a list of the shareholders and their places of residence in addition to a statement of the total amount of all indebtedness, generally including current expenses. In some states the schedule must contain a statement of the respective companies' entire gross receipts, entire operating expenses, and entire net earnings, with a supplementary statement of the amount of such receipts, expenses, and earnings resulting from business done exclusively within the state. Neglect to furnish these sworn schedules is generally attended with heavy penalties, and false statements are punishable as perjury. Furthermore, in many cases, the state officials, to whom these reports are made, are empowered to require additional statements when necessary, and even, as provided in a number of states, to summon witnesses, to examine them under oath, and to compel the production of corportion books and papers. The work of assessment on the basis of these returns is generally intrusted to a specially constituted state board, by whom the valuation is determined and in most cases apportioned among the local taxing districts for the computation and collection of the tax. Railroad real estate not directly employed in traffic operations is generally both assessed and taxed by local officials.

"The chief advantages of this general method may be summed up as follows: The duties of assessment are in the main performed by experienced and competent officials, thus minimizing the liability to unequal assessments, as between localities and between companies, under a property tax; the popular demand that corporations be taxed upon the same basis as individuals is realized; the method is in accord with both state and federal constitutional provisions, besides being both reasonably productive and constant in its yield from year to year."

After the assessment is made, as above described, the values are distributed to the local tax districts in proportion to the mileage in each and taxed at the local rate. In assessing roads which cross the boundaries of a state, the assessment board, ascertains the value of the property as a whole and then assigns a value to that part in each state on a mileage basis. This principle of apportionment has been sustained by the courts.

Very great difficulties arise when we try to obtain a measure of value of the franchise. Students of finance and taxation have agreed that there are no less than thirteen separate and distinct methods of taxing corporations which are summed up as follows:

1st. The actual value of the property or the realty added to the personalty, visible or invisible, which is the method employed in the majority of cases.

2nd. The cost of the property, original and improvement.

3rd. Capital stock at par value.

4th. Capital stock at market value.

5th. Capital stock plus bonded debt at market value.

6th. Capital stock plus total debt both funded and floating.

7th. Bonded debt or loans.

8th. Business transacted.

9th. Gross earnings.

10th. Dividends.

11th. Capital stock according to dividends.

12th. Net earnings.

13th. Franchise.

It can be seen that each of the above methods of taxation involve the value of the franchise, except perhaps the cost of the property method, and it is next to impossible to determine in either case what part of the value belongs to the franchise alone. There are many methods adopted in the different states, of determining this value among which it will be well to enumerate a few, such as The value of the Capital stock after the value of the property has been deducted. The value of the stock, less the value of the realty. The value of the stocks and bonds less each or both of the values of realty and tangible property and various others. Each state arriving at its franchise value in its own way without any seeming regard for uniformity, and still more crude and wonderful, often measuring the franchise values of different corporations in entirely different ways.

The real necessity for arriving at a tangible value for the franchise in any case arises from the fact that in a great many of the states the taxes on all kinds of property must be uniform to be constitutional and if it can be shown that the tax is on a franchise instead of on property, the necessity for uniformity vanishes. Again, if the tax is on a franchise it can be upheld as not interfering with interstate commerce and further that while a tax on property is subject to certain exemptions, under the principles of the property tax, a tax on franchises cannot claim these exemptions nor bring forward the claim of double taxation.

It is frequently held by the corporations that the capital stock represents property and that the two are interchangeable and consequently a tax on the property and an additional tax on the stock or the franchise would be double taxation and unjust. A number of the states have decided that the tax on capital stock is not a tax on the property and the federal courts have affirmed that decision, which practically means this, that a tax on capital stock is an excise tax and not a tax on property and therefore does not come under the various state constitutional provisions that the taxes on all property must be uniform.

Some states tax corporations upon the par value of the capital stock; but where it is a common occurrance that the market value of the stock is only a small fractional part, in some instances, and in others many times the par value, it cannot be held that the par value is any index to the real value of the property. Or, if the real value of the stock be taken the situation is unimproved, especially in the case of railways constructed principally from the proceeds of a bonded debt. The profits from a road created in this way may often be enormous and the stock still have a very small value from the fact that the profits are mainly used in paying the interest on the bonded debt and do not become available for dividends on the stock and hence the market value of such stock may be very small. This makes it plainly evident that the value of the stock and the property are in no wise identical and a tax on the capital stock would not be a tax on the whole property.

There seems to be a well grounded interpretation of the principle that no state may levy a tax which will interfere in any way with interstate commerce; but it has been repeatedly held that a tax on the franchise of a corporation is valid, even in cases where the value of the franchise is measured by the gross receipts, part of which may come from the interstate commerce of the corporation, while a tax other than on a franchise tax would be invalid, on account of that interstate business.

It seems to the economist a useless distinction between the value of the franchise and the value of the real property and such distinction is rather legal than economic. Notwithstanding the value of such distinction to the lawyer in trying to evade some constitutional restrictions, to the student of economics the value of the franchise may as well be added to the value of the property for the question of a just tax depends on the ability to pay and is determined by the earning power of the corporation, which is best measured by the business done, minus the expense of doing such business.

Turning to the economics of the different methods of taxation, we see that the general property tax locally assessed was the primitive method in every case and the general tendency is to leave it behind as inadequate and unjust because as levied by local assessors it lacked uniformity.

The method of taxing capital stock at its market value has already been shown to be unjust as in this method the heavily bonded company would entirely escape taxation while in the case of a company without bonds the market value of the stock does not bear any relation to its real value or earning capacity because of the possible manipulations of the stock exchange.

The method of capital stock at its par value has only one point in its favor, that of ease in establishing a base of assessment and is open to all the objections of the previous method with the addition of being more liable to evasion from the fact that only a very small capital may be issued and sold to the stockholders at many times its par value in order to have a small basis for taxation.

THE CAPITAL STOCK PLUS BONDED DEBT.

As to the method of the acceptance of the asset side of the balance sheet for a valuation of the property covered therein. No one in the least familiar with the methods of railway accounting will care to contend that the balance sheet can give anything like a fair valuation of the property as it exists. There is no possible guarantee that the items usually entered as "cost of road" and "cost of equipment" represent anything like the original capital actually put into the road and even if it did, the large fluctuations in the prices of material and labor, during the periods intervening between the times of construction and the present, would render such a statement quite valueless as a determinative of the present value. According to the Reports of the Interstate Commerce Commission the aggregate assets of the railways on June 30th, 1903 was \$15,159,097,858 as shown by their balance sheets and no one for a moment would care to say, even after mabing allowances for possible and probable duplication of items, occasioned by intercorporate relation, that the railways of the United States ought to be valued at that figure, consequently we can see that the balance sheet is practically useless for our purposes of valuation.

Capital Stock plus Bonded Debt as a measuring of total values has at different times received the qualified approval of

the courts and may be termed the "Stock and Bond Plan" or Rule of the Supreme Court. There are many points to be made in favor of its acceptance and a number against it. The Supreme Court has handed down the following which I quote from State Railroad Tax Cases, 92 W. S. 575 as follows:

"The Statute of Illinois (which is on the Stock and Bond plan) and the rule adopted by the board of equalization, under the power conferred by the clause we have just recited, may not be the wisest mode of doing complete justice in this difficult matter; but we confess we have, on the whole, seen no scheme which is better adapted to effect the purpose, so far as railroad corporations are concerned, of taxing at once all their property, and of making their tax just and equal in its valuation to other taxable property of the State."

Speaking of the market values the Court further says:

"It is therefore obvious that, when you have ascertained the current cash value of the whole funded debt, and the whole cash value of the entire number of shares, you have, by the action of those who above all others can best estimate it, ascertained the true value of the road, all its property, its capital stock and its franchise; for these are all represented by the value of its bonded debt and of the shares of its capital stock."

The Supreme Court further states in the case of Adams Express Co. vs. Ohio, 165 W. S. 185:

,'Now, it is a cardinal rule, which should never be forgotten, that whatever property is worth for the purposes of income and sale it is also worth for purposes of taxation. Suppose a bridge were entirely within the territorial limits of a state, and it appeared that the bridge itself cost only \$1,277,000, could be reproduced for that sum, and yet it was so situated, with reference to railroad or other connections, so used by the traveling public, that it was worth to the holders of it, in the matter of income \$2,000,000, could be sold in the markets for that sum, was, therefore, in the eyes of practical business men of the value of \$2,000,000, can there be any doubt of the state's power to assess it at that sum, and to collect taxes from it upon that basis of value? Substance of right demands that whatever be the real vaule of any property, that value may be accepted by the state for purposes of taxation, and this ought not to be evaded by any mere confusion of words. Suppose an express company is incorporated to transact business within the limits of a state and does business only within such limits, and for the purpose of transacting that business purchases and holds a few thousands of dollars' worth of horses and wagons, and yet it so meets the wants of the people dwelling in that state, so uses the tangible property which it possesses, so transacts business therein that its stock becomes in the markets of the state of the actual cash value of hundreds of thousands of dollars. Does substance of right require that it shall pay taxes only upon the thousands of dollars o ftangible property which it possesses? Accumulated wealth will laugh at the crudity of taxing laws which reach only the one and ignore the other, while they who own tangible property, not organized into a single producing plant, will feel the injustice of a system which misplaces the burden of taxation. *

"But if the state comprehends all property in its scheme, then the good will of an organized and established industry must be recognized as a thing of value. The capital stock of a corporation and the shares in a joint stock company represent not only the tangible property, but also the intangible, including therein all corporate franchises and all contracts, privileges and good will of the concern. * * * * *

"The value which property bears in the market, the amount for which its stock can be bought and sold, is the real value. Business men do not pay cash for property in moonshine or dreamland. They buy and pay for that which is of value in its power to produce income, or for purposes of sale.

"In conclusion, let us say that this is eminently a practical age; that courts must recognize things as they are and as possessing a value which is accorded to them in the markets of the world, and that no fine-spun theories about situs should interfere to enable these large corporations, whose business is carried on through many states, to escape bearing in each state such burden as a fair distribution of the actual value of their property among the states require."

This rule of the Supreme Court, that is the acceptance of the judgment of the market, in the price it pays for its railroad securities, as a fair measure of value, is a rule of some thirty years standing and many of the reasons which made its application that long ago of value have been reduced or obliterated by the changed conditions under which the great railway properties are now organized and operated. The purchasing of railway securities for investment by individuals is of very small moment as compared with the purchase for purposes of organization and consolidation by Railway corporate powers and syn-

dicates and when it is realized that the conditions which influence the individual in deciding the price he can affard to pay for those securities as an investment, it is readily seen that the market price of railway stocks or bonds is by no means a correct or fair measure of the cash value of those railways, as that phrase is used for purposes of taxation, and is defined by the statutes. As a case in point the recent flight of Northern Pacific stock to the \$1000 mark is cited as explanatory of the different conditions which influence purchase. No individual purchaser for purposes of investment could consider such a price and yet for purposes of control it may have been justified.

A second weighty reason why this rule of the Supreme Court fails to satisfy the requirements of a just valuation is the fact that a large majority of the railway stocks and bonds are never bought and sold upon the market and consequently their price is never quoted. In substantiation of this fact some two or three years ago the Interstate Commerce Commission undertook to make a valuation of railway securities on the basis of market quotations and the difficulties which they encountered are best shown by the following quotation from their report:

"It may not be inappropriate, as bearing upon the extent to which reliance can be placed upon the figures submitted, to state the difficulties encountered in this computation * * * The chief difficulty was found in the fact that by far the larger proportion of railway securities are not subject to extensive purchase and sale and on this account fail to disclose the market price. This report deals with over two thousand corporations while the number whose securities were quoted on the stock market in such a manner as to enable a satisfactory computation of the value of the property which they represent in conformity with the rule embodied in the resolution, did not exceed two hundred and twenty-five." Note—the resolution referred to was a resolution passed by the Senate asking for the valuation.

As a conclusion arrived at by the state commission, I quote further from their 17th Annual Report:

"While market valuation of such securities as show a wide market may be of great use in checking values arrived at by other methods or in enabling a correct interpolation of commercial conditions the Commission does not hesitate to say, as a result of this experience that the rule fails to justify a very great degree of confidence in the results to which it leads. If an authoritative and trustworthy valuation of railway properties is to be arrived at, the balance sheet, whether on the side of assets or liabilities, can not be accepted as the starting point for investigation." This method is, however, preferable to any of those previously discussed because it prevents the exemption of the heavily bonded companies.

However, when the tax is on the stock and bonds as well, the revenue will still be inadequate because the tax is applicable only to the bonds owned and held by residents of the commonwealth levying the tax. Further, by the complication of interstate policy the proceeds of the tax on bonds held by non-residents will accrue, not to the state of residence of the bond holder, but to the state wherein the corporate property is held or situated.

TAX ON GROSS RECEIPTS.

The Railroad Tax Commission is usually referred to as the chief authority for defense of the license fee or tax on gross receipts plan and the following is quoted from their report:

"Finally the committee will say that of all the systems of taxation examined by them, those in England, the countries of Europe, and in Michigan and Wisconsin among the states of the Union, seems to them the most intelligent and in conformity with correct principles. The Michigan and Wisconsin principles would seem to be especially commendable. The systems in use in many of the older states on the contrary, and notably in Massachusetts, New York, Pennsylvania and Ohio, are very cumbersome and present hardly any features worthy of study and imitation."

Prof. Henry C. Adams, statistician of the Interstate Commerce Commission is in accord with Dr. E. R. A. Seligman and other economists in their voiced objections to the gross receipts tax and I quote from him as follows:

"The first alternative presented to the financier lies between a gross or a net item as a basis of assessment. If, however, one can confine himself purely to economic considerations, the decision is not difficult. A tax on the gross earnings of a corporation cannot be satisfactory because it takes no account of the operative expenses incident to the securing of such earnings. * * * * It is evident, therefore, that a just assessment as between corporations must take into account earnings as well as expenses."

The license fee presents an advantage to the railroads however, which is denied to the individual property owner in that in good years when the country is prosperous the railroads will have larger gross receipts and even if we still consider the non-existence of any definite relation between gross receipt and net revenue yet the railroads are better enabled to pay the taxes than they would be in poor years when the gross receipts are less and the expenses possibly as heavy. Consequently they have the benefit of a tax which increases or decreases with their business dependent on the conditions of the money market, crop reports, demand for commodities, etc., which condition or form of sliding scale tax is not enjoyed by any other form of property.

That the fundamental principle of taxation, the application of which all true economists strive to attain, the principle that all taxation shall be just and uniform is openly violated by the gross receipts tax can readily be shown.

In the first place, under this method of taxation all the property outside the right of way of the corporation in question furnishes revenue, the sum total of which gives the gross receipts on which the tax is based, and when this tax is collected and the property outside the right of way is again left open for local assessment and taxation in the civil division in which it is located, we see at once that such property is subjected to double taxation which is unjust as soon as it is shown to be ununiform.

A tax on the gross receipts of any railway in Iowa would be a tax on the receipts derived from all its property in Iowa of every form and a tax on its city property, used as offices or for any purpose outside the right of way, levied and collected for local purposes would be an unjust tax as that property had already paid its just share of taxes through the levy on gross receipts.

The tax on gross earnings was recommended by the railroad tax commission because in their opinion it was least liable to evasion and was the most readily ascertained, but they failed to recognize or seemed to ignore its one fatal defect, that is, that the gross earnings bear no relation whatever to the true earning capacity of the property.

As an instance, a line built on easy curves and minimum grades at an excessive cost must necessarily have large gross earnings to pay a reasonable return on the cost of construction and a tax on the gross earnings would be virtually making the

good line pay a tax on the ingenuity of the engineers and the

enterprise of the constructors.

Again, two different lines of railway are frequently constructed in the same state but under entirely different conditions, one of them having every natural advantage of location and topography which would necessitate but a minimum amount of the gross earnings to pay a reasonable return on the outlay, while the other may have been forced by necessity to overcome many natural disadvantages of location and construction in reaching the same field of revenue and yet both present the same facilities to the public. It needs no further argument to show that a much larger part of the gross earnings is required to pay a reasonable return on the investment in the second case and consequently a taz on the gross earnings would be imposing a penalty on the more expensive enterprise which is economically, at least, an injustice. As before stated the courts have repeatedly held that an enforced rate which deprives the carrier of a reasonable return on the investment is unjust and a tax which worked the same injustice should also be so held. To avoid these defects several states have introduced a graded gross receipts tax, the rate percent increasing with the earnings, which eliminates in part the objections above stated but not wholly because there is no assurance that the gross receipts bears any particular relation to the net earnings or that a proportional increase in net earnings will naturally follow an increase in gross receipts.

A line of railway so situated as to be under a heavy maintenance and operating expense per mile and whose returns showed gross receipts amounting to \$10,000 per mile, might have a smaller net income per mile than a line more favorably situated but having gross receipts amounting to only \$6,000 per mile, and the graded gross receipts tax would increase the injustice to the line of high first-cost and maintenance unless it could be shown that the net revenue increased in proportion to the larger gross receipts which is seldom the case.

TAX ON BUSINESS TRANSACTED.

A tax on the business transacted is open to more objections than the gross receipts plan because the amount of business bears no necessary relation to the net revenue or ability to pay.

A business may be extraordinarily large and only nominally lucrative which is often occasioned by fierce competition or poor management and a tax on the amount of business would fail to consider these conditions. The tax on dividends or capital stock according to dividends are economically the same but legally differ materially. An objection raised to this form of tax by economists is that a part of the rightful earned dividends may not be declared but put into a reserve fund and so escape the tax, but as the reserve fund cannot be indefinitely increased but must eventually be turned into the surplus-fund which increases the capital, it will finally come under the scope of taxation as increased earnings on the larger capital so the objection is in itself unimportant.

Again, the reserve fund may be turned to improvements or equipment, but as these increase the capital they will eventually

return as increased earnings or dividends.

A stronger objection than either of the above arises from the fact that the tax is inadequate when applied to a corporation having a bonded debt because while a company without a bonded debt has sufficient receipts to pay a dividend on the stock of say 10%, another company, with the same earnings, having a bonded debt, would require say $7\frac{1}{2}\%$ of that dividend to pay the interest on the bonded debt and would have a balance of only $2\frac{1}{2}\%$ for dividends and the first company would really pay four times as much tax as the latter.

TAX ON NET EARNINGS.

The tax on net earnings is theoretically the most perfect and logical form of taxation and would have the advantage over the gross earnings tax in that it would not discriminate between different corporations or subject the one under the most unfavorable conditions to the highest tax, but it does have objections, which, under our present tax system would be fatal. One is, the possibility of having the net earnings diverted as excessive salaries to the stockholders as officers, or so manipulating the system of accounting that profits would be eaten up and charged as nominal operating expenses, thereby leaving no net earnings to be taxed. A second that under our present system of property taxation it would work an injustice to the holder of other realty in times of depression in that while the holder of real estate or other property not controlled by a corporation is still required to pay a tax for the running expenses of government and the protection afforded him. The corporation would not pay a tax unless their returns would show a net earning which would very likely not be the case as nearly all corporations are required to operate even at a loss in order to avoid a complete dissolution of their property in times

of adversity by reason of the fact that a large amount of the corporate property has no practical value except in connection with the immediate purpose for which it was organized. This condition is likewise true of other forms of private property in times of adversity and as the corporation receives a like protection with other forms of realty and is permitted by the government to earn a percentage of what in ordinary conditions is nominally its due, it is plainly just that a tax should be imposed. As the tax on net income would discriminate in favor of corporate property as against personal property or real estate, it is shown to lack uniformity, which is the sacred principle of a just tax.

Under the net earnings tax the corporations pay a bountiful tax in times of prosperity and in times of adversity pay nothing. No other form of property is blessed with such a sliding scale and the owner of real estate or other property outside the corporation must suffer an undue hardship in paying the whole burden of

taxation while operating at a loss.

We believe the best method of valuation which receives the approval of the courts is properly termed the "inventory method," and takes into account the fact that the value of railway property exists in two forms, which may be designated as its physical plant and its franchise. Each one of these forms is capable of analysis and subdivision and when thus divided, each element is capable of separate appraisal. The United States Inter-State Commerce Commission has formulated a system of construction accounts and now requires that all improvements and betterments to property be annually reported according to their classification.

That the right to tax franchises, privileges, etc., exists, is held by the courts, and I quote from various decisions as follows:

"State Board of Assessors vs. Central R. Co., 48 N. J. Law, 283, 288, 347. They have a value which can be estimated, and this is the proper duty of the assessor or the board of review. In State Railroad Tax Cases, 92 U. S., 603, it is laid down: 'That the franchise, capital stock, business and profits of all corporations are liable to taxation in the place where they do business, and by the state which creates them, admits of no dispute at this day.' 'Nothing can be more certain in legal decisions' says this court in Society for Savings v. Coite, 6 Wall., 607, 'than that the privileges and franchises of a private corporation * * * may be taxed by a state for the support of the state government.' State Freight Tax Case, 15 Wall., 232: State Tax on Railway Gross Receipts, 15 Wall., 284'. In Wil-

mington Railroad v. Reid, 13 Wall., 268, the court says that 'nothing is better settled than that the franchise of a private corporation—which in its application to a railroad is the privilege of running it and taking fare and freight—is property, and of the most valuable kind.' And in Morgan v. Louisiana, 93 U. S., 223, it is said that they 'are rights or privileges which are essential to the operations of the corporation, and without which its road and works would be of little value. * * They are positive rights or privileges, without the possession of which the road of the company could not be successfully worked.'

"The value of franchises, especially in connection with the property reasonably necessary for their exercise and use and which without them would be of little or no practical value, can be estimated as well as the value of other subjects of taxation, though perhaps not as readily or with the same degree of certainty. The cardinal requirement is that, as property, they shall be taxed. All else is matter of method and detail. * * *

"The value of the property of the company consists in the franchises connected with the tangible property, without which the latter would be of little or no value. Hammock v. Loan and Trust Co., 105 U. S., 90; East Ala. R. Co. v. Doe, 114, U. S., 340, 353. The entire property of the corporation, thus considered, is to be regarded and treated as indivisible for the purpose of sale under adverse process; and to permit it to be sold otherwise would defeat the uses impressed on it for public purposes, and which constituted the consideration for the grant of its franchises."

In making a valuation under the inventory method the first step would be to have made by a competent engineer a careful estimate of the value of each of the elements which enter into the entire physical plant of the railway. The physical plant being only a part of the real value of a property, the earning power must also be considered; this earning power is best determined by financiers and the financial rule for valuation is that the worth of a property is determined by what it will produce in actual income. In a case wherein the income is assured by a glance at the past history of the corporation, the risk is less and the real value of the property more in proportion. The earning power is the final and supreme test of value in the opinion of the financiers. Consequently the second step would be to make an analysis of the operating accounts and a study of the history of the property in so far as that would be necessary to determine its

condition and business prospects, because an inventory and appraisal of the elements which make a business profitable is just as essential as an appraisal of the elements of its physical plant.

An argument used against this inventory method is the considerable expense attached and that the inventory would in a short time fail to represent the existing condition. In answer thereto it can be stated that the annual reports required by the Interstate Commerce Commission and to the State Railroad Commissioners if made in accordance with the classification of "Operating expenses" and "Construction expenses" and with the established form for the classification and report of earnings, would practically permit of an annual correction of the inventory and thereby an annual declaration of values.

Among the reasons for a careful detailed valuation of the railway properties of the United States there are two which stand out as worthy of particular mention. In the first place, the rulings of the courts for the determination of reasonable rates for freight and passenger traffic, as handed down to us through their decisions, lay particular stress upon a fair value of the roads where rates are under complaint. It is not essential or a part of this paper to cite a list of the particular decisions setting out this position but it is sufficient to state that no tribunal to whom the question might be submitted could pass a satisfactory judgment upon the reasonableness of particular rates without taking into consideration the just valuation of the property whose rates are questioned. This is obvious from the facts that the courts have repeatedly held that an enforced rate which is so low as to deprive the carrier of its property, or in other words, a denial of the right to a reasonable return upon the capital invested is contrary to the Constitution. Of course many other matters must also be considered in deciding upon the justice of any rate such as the proper adjustment of schedules, similarity of conditions, etc., but including all of these is the idea that the rate which is reasonable and fair to all concerned is the one which gives a reasonable return upon the capital invested in property engaged in the service of transportation.

The second reason is scarcely less important and arises from the fact that the subject of reasonable railway taxation is very closely related to the subject of reasonable railway rates, and the general fact that the value of corporate property is made the basis of public contributions is shown from the table, "analysis of taxes, by states," given in another part of this paper.

So long as a state exercises the right of restricting the rates of the railways they must also exercise a protective right as well, because the right of sovereignty is not simply coercive but is also protective. When a government by its restrictions reduces the rates and thereby the income from the property, the courts have held that they must likewise reduce the taxes imposed if the income does not still produce a reasonable return upon the capital invested in transportation. This brings us to the question of what is the actual amount of capital invested in any transportation enterprise and we will need to follow through the thread of actual construction cost to learn whether the sum total of the stock and bonded debt is a fair measure of the capital really invested in the enterprise. Railroads are usually constructed in the following manner:

A few persons, five or ten in number who are usually not capitalists, associate themselves for the purpose of forming a corporation and securing a franchise or a charter to construct a line of railway between two previously selected points of vantage.

Money is subscribed or borrowed sufficient to pay for preliminary surveys over two or more slightly different lines between the selected terminal points of the proposed road.

The people adjacent to each of the proposed routes become interested in having the line pass near their towns, lands or places of business and frequently give a right of way through their lands in addition to the liberal donations of money in order to secure the location of the road on one of the specified lines. The road is usually located on the line, other things being equal, which makes the most liberal donations of land and money. promoters then have little difficulty in raising enough money by collecting the donations or borrowing money on them to build the first section of the line, usually only a few miles in length, which they at once bond for more than the cost of the completed section. The capitalist then appears and after satisfying himself that the interest on the bonds will be paid when due, purchases them at a liberal discount on their face value and the proceeds from this bond sale are converted into a second section of the line which is again bonded for sufficient sums to continue the construction of the road.

When the road is finally completed it will be found to have been bonded for more than the cost of construction and everything has been paid for without drawing more than a nominal sum from the pockets of the original stock holders.

If, as required by the laws of some states, a percent of the original capital stock has been paid in, the money is retained in the treasury and used in paying the first annual dividend.

The face value of the stock per mile of road is usually about equal to the face value of the bonds which have already been issued and very few cases will be found upon examination, to show that the original stock holder had sufficient means to build and equip the line without the issuing of bonds to nearly the full actual cost of construction. These bonds then represent practically the whole original cost of construction in all save a very few cases and the stock issued does not represent anything but a very small portion of this original cost.

This stock is issued by the promoters to themselves and does not represent a value which in any manner benefits the public and it is unjust that the public should be required to pay rates of transportation which will insure dividends upon such stock. The financiers, whom the courts say are the ones most eminently fitted to judge of such matters, are satisfied with the interest paid on the bonds else they would have refused to buy them and in no case can it be shown to be just to demand dividends from the public upon stock when the bonds issued covered the cost of the road.

As to the best method of finding the actual value of the road upon which it is fair and just to demand dividends from the public in the rates which they are required to pay, attention is called to the methods employed by the State of Texas persuant to the requirements of a law enacted by the Texas State Legislaturwe in 1893, which is given in part as follows:

"The Railroad Stock and Bond Law, as published under Title XCIV, Chapter 14, Revised Statutes of Texas, 1895, de

clares:

'Article 4584 a.,—Among other things, the power and authority of issuing or executing bonds, or other evidences of debt, and all kinds of stock and shares thereof, and the execution of all liens and mortgages, by railroad corporations in this State, are special privileges and franchises, the right of supervision, regulation, restriction, and control of which has always been, is now, and shall continue to be vested in the State Government, to be exercised according to the provisions of this and other laws.

'Article 4584 b—Hereafter no bonds or other indebtedness shall be increased or issued or executed by any authority whatsoever, and secured by lien or mortgage on any railroad or part of railroad or the franchises or property appurtenant or belonging thereto, over or above the reasonable value of said railroad property; provided that in case of emergency on conclusive proof shown by the company to the Railroad Commission, that public interests or the preservation of the property demand it, the said Commission may permit said bonds, together with the stock in the aggregate, to be executed to an amount not more than fifty percent over the value of the said property.'

It further provides, with regard to the railroads constructed and in operation at the time of the passage of the law:

'Article 4584 c-It shall be the duty of the Railroad Commission to ascertain and in writing report to the Secretary of State, the value of each railroad in this State including all its franchises, appurtenances and property. After it shall have prepared said report of value, the Commission shall give the company interested ten days' notice in writing, by registered letter to the president, treasurer or receiver of said railroad, to the effect that said report is ready to be made, and that if it have any objections thereto it must file them in writing, within forty days after said service, or the same will be so deposited with the Secretary of State as correct. Should the company or its duly authorized representative file with said commission any objections to said report of value, the Commission shall duly investigate and pass on the same. On investigation, if the Commission conclude that its report of value is too low or too high, then it shall make the necessary correction before filing it. Should no objections be filed within the time permitted, or being filed and on examination found without merit, the Commission shall forthwith file its said report in the office of the Secretary of State, where it shall remain as a public record, as a limitation for the issuance of indebtedness under the limitations prescribed in Article 4584 b. To promote public interests and protect private rights, the Commission, after due notice under the rule herein prescribed, may correct its report of value of any railroad at any time it may deem proper.'

With respect to railroads constructed after the passage of the law, or existing at that time, but against which stocks and bonds were not outstanding in excess of their value, the following section defines the method of procedure to be had in making the application for issuance of stocks and bonds, and defines the basis on which the Railroad Commission must make its valuations.

'Article 4584 f-Should any company or corporation authorized to construct, own or operate a railroad in this State, desire to issue bonds or other indebtedness, to be secured by lien or other mortgage on its franchise and property, in advance of the completion of the said railroad, it shall make application to and first procure the consent of the Railroad Commission thereto. In said application it shall exhibit to the Commission its contract with the construction company, if it have any; the profile of its completed road or part of road, the evidence of its right of way, depot grounds, terminal facilities; the extent and value of work done or in process of completion; the amount of property received; the amount of stock subscribed and the amount paid in; and all other necessary facts showing the value of the franchises and property proposed as security for said contemplated If, on investigation, the Commission is satisfied that the company is acting in good faith, and that its contract with the construction company is reasonable and fair to the public, then it shall authorize the execution of said indebtedness and lien to the extent necessary for the demands of the work, at no time to be more than fifty per cent. over the value of the whole property and franchises.'

After authority has been obtained from the Commission to issue stocks and bonds upon a railroad, the same or any portion of it which has been completed, Articles 4584 h and 4584 i of the Statute, which is not necessary to quote here, prescribe the method of procedure to have the stocks and bonds registered in the office of the Secretary of State. It is only after such registration that the securities become valid obligations against the property which is mortgaged. Stocks and bonds are approved and authorized to be registered by the Commission only upon and to the actual value of the completed railroad, as the same is determined by inspection."

Under this law the Railroad Commission of Texas has appointed engineers to assist in making these valuations who have gone personally over the ground on foot, profiles in hand and made a detailed inspection of the roads as they exist and affixed values thereto. The quantities of excavation and embankment where original records could not be obtained were approximated from the profiles or from measurements made upon the finished

road bed, and the classification was determined by inspection. Bridges were estimated by actual measurement where original cost records were not obtained. Extent of Right of Way, depot and terminal grounds were obtained from city and county tax records or furnished by the railroad companies.

After a complete and careful examination of the line by the engineers, detailed estimates were prepared on sheets of the fol-

lowing form:

ESTIMATE SHEET: "A," ROADBED, STRUCTURES, ETC.

1134-304-21/m

RAILROAD COMMISSION OF TEXAS

			_Rail			Mi	le No]	Fro	m		176 30 20 20 20	
ITEM	ITEM to Issue S				tock and Bonds is Issued			Estimate for Registra- tion of Stock and Bonds			Estimate for Registra- tion of Stock and Bonds			
		de				1	le		90		le		199	
	Rate	1	Amo'nt	Value		Rate	Amo'nt	Value		Rite	Am'nt	Value		
Right of Way		Acre												
Depot Grounds Clearing & Grubbing		Acre							100					
Earth Excav	1	Acre Cu. yd.	,		• • • •									
Loose Rock Excav														
Solid Rock Excav		Cu. yd.												
Earth Embank		Cu. yd.												
Hauled Embank Rip Rap		Cu. yd.												
		Zu. yd.												
Foundation Piling		Cu. yd. Lin, ft.												
Grillage		B. M.											1:::	
Masonry Piers		Cu. yd.												
Cylinder Piers		Lin. ft.												
Masonry Culverts Steel Trusses		Cu. yd.												
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Drains, Box		Lill. It.												
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Switch Furniture		Lin. It.												
Railroad Crossings		Set												
Interlockers														
Telegraph														
Passenger Depot														
Freight Depot		Each												
Cotton Platform		Each												
Section House		Sq. ft												
Water Station Stock Pen		Each												
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Track Scales		Each								1				
Total	1	200											1,.	
	T	TARREST PROPERTY.		CONTRACTO	1 255	13/5	0.742.0		Section 1	A Trans	Ra	;1		
Mile No	Fre	om			-				VAR		Na	11		
											6-5-5			

ESTIMATE SHEET: "B," ROLLING STOCK. ESTIMATE SHEET: "C," MISCELLANEOUS ITEMS.

RAILROAD COMMISSION OF TEXAS

		Rail										
ITEM		to Issue Stock and Bonds is Issued				Estimate for Registra- tion of Stock and Bonds Made			tion of Stock and Bonds			
	No.	Rate	Value		No.	Rate	Value	1	No.	Rate	Value	1
Passengers Locomotives												
Freight Locomotives												
Switch Locomotives Passenger Cars												
Passenger Cars												
Chair Cars												
Baggage Cars												
Express Cars												
Postal Cars												
Officers' Cars												
Box Cars												
Flat Cars												
Stock Cars												
Coal Cars												
Tank Cars												
Refrigerator Cars												
Water Cars												
Hands Cars												
Push Cars												
Total "B"												
"C" MISCELLANEOUS:									1			
Road Tools									1			
B. & B. Tools												
Machine Tools												
Machine Shops												,
Malhinery												
Round Houses												
Turntables												
Furniture, Etc												
Stationery				• • • •				• • • •				
Terminal Grounds												
Franchises												111
Charter Fees, Etc												
Legal and Engr. Expenses											184 34 3	
Legal and Engr. Expenses Interest during Constr					1							
Total "C"					1				-			-
10tal C					1							

Rail.

The values applied to the several items making up the estimate of construction cost were fixed equal to the current market (contract) price plus a liberal allowance for contingencies and the values applied to real estate and Right of Way were fixed according to the current market price of adjoining property, making no deduction for land donated or acquired for less than its market value. Grading quantities were estimated at the outside (contract) price and materials at the market quotations plus the freight rate to the point of construction and a liberal distribution charge. No deduction was made for depreciation of any article making up the road bed and structures and no additional amount

Totals "B" and "C"

was added for the value of a seasoned road bed.

Franchises were not valued except municipal franchises and then only where the streets of a city or town were occupied by the tracks of the railroad in lieu of the purchase of adjoining property when the valuation was placed at about 33 per cent of the value of improvements thereon. 5 per cent to 6 per cent of the total estimated value of the railroad was allowed to cover the items of legal and engineering expenses and a like amount for interest during construction.

Since the passage of the Stock and Bond law the Railroad Commission has valued some 10,349 miles of railroad in the state of Texas and the list as completed up to October 20, 1903, is shown in the following table:

TABLE NO 1

NAME OF RAILROAD	Mi'eage	Valuation	Value Per M le
Beaumont Wharf and Terminal	3.08	\$ 179,481	\$ F8,273
Cane Belt	68.69	830,968	12 097
Chicago, Rock Island and Mexico	91.75	1,475,361	16,080
Chicago, Rock Island and Texas	147.29	2,760,423	18,471
Dallas, Cleburne and Southwestern	9.77	155,917	15.959
Denison, Bonham and New Orleans	24.11	375,266	15,565
Eastern Texas	30.41	454,528	14,947
Fort Worth and Rio Grande	454.13 143.10	5,771,582	12,769
Galveston, Harrisburg and SanAntonio		2,003,839	14,003
Galveston, Houston and Henderson	919.06 48.85	16,142,298	17,564
Galveston, Houston and Northern		1,527,023	31,259
Gulf, Beaumont and Kansas City	56.36 67.55	1,000,000 676,485	17,743
Gulf, Beaumont and Great Northern	58.22		10,015 14,653
Gulf, Colorado and Santa Fe	987.34	853,123 16,649,746	16,863
Gulf, Western Texas and Pacific	109.67	1.318.082	
Hearne and Brazos Valley	16.42		12,019 6,493
Houston and Texas Central	690.42	106,624 $13,683,834$	19 820
Houston, East and West Texas	190.69	2.042,693	19 820
International and Great Northern	1,049.93	19,928,547	18 981
Missouri, Kansas and Texas of Texas	1.069.83	16,688,500	15,599
New York, Texas and Mexican	122.93	1,464,206	11,911
Crange and Northwestern	32.80	458.793	13,987
Paris and Great Northern	16.18	288,718	17.844
Pecos River	54.13	392,405	7.249
Red River, Texas and Southern	57.49	1,215,332	21.140
Rio Grande	22.17	310,551	14,008
Rio Grande and Eagle Pass	26.89	234,695	8,729
Rio Grande and El Paso		481.824	23.912
St. Louis, San Franciso and Texas	6.74	407.454	60,453
St. Louis, Southwestern of Texas	652.41	10.057.889	15,706
San Antonio and Arkansas Pass	687.67	8,677,698	12,619
Southern Kansas of Texas	114.95	1,190,672	10.358
Sugarland	14.12	109,415	7.749
Texarkana and Fort Smith	79.24	1,603,789	20,240
Texas and Louisiana	21.91	203.688	9,297
Texas and New Crleans	433.14	8,667,796	18,896
Texas and Pacific	1,039.33	17,730,689	17 060
Texas Central	215.36	2,885,256	13.397
Texas Mexican	162.40	1,457.638	8,976
Texas Midland	112.49	1,914,578	17,020
Texas, Sabine Valley and Northwestern	38.41	398,848	10,384
Texas Southern	68.69	743,980	10,831
Velasco, Brazos and Northern	20.06	240,256	11,997
Weatherford, Mineral Wells and Northwestern	23.00	327,496	14,239
Wichita Falls	17.96	242,838	13,521
Wichita Valley	51.36	486,768	9,478
	10,348.75	\$166,819,992	\$ 16,120,00
			,,

The reduction in the average indebtedness of the railways of Texas since the law went into effect is well shown by table No. 2.

TABLE NO. 2

ON JUNE 30	Miles of Railway in Operation	Stock Out- standing— Fer Mile	Bonds Outstand- ing—Per Mile	Total Stocks and BondsOut- standing— Per Mile
1894	9,154	15,076	25,726	40,802
1895	9,291	14,874	25,420	40,291
1896	9,437	14,647	25,302	39,949
1897	9,484	14,320	24,793	39,113
1898	9,540	14,205	24,036	38,241
1899	9,702	13,997	23,562	37,559
1900	9,867	13,724	23,202	36,926
1901	10,154	12,922	22,649	35,571
1902	10,617	11,971	21,779	34,167
1903	11,029	11,971	21,464	33,435
Total reduction for 9 years		3,105	4,262	7,367
Average reduction per year for 9 years	1 - 3 - 1 - 1	345.00	473.55	818.55

The fact that the valuation and taxation of the franchise was omitted by the Stock and Bond law of Texas is an excellent recommendation to the purchaser of transportation. The franchise is no real part of the road, its existance is called forth and firmly established before the project is well under way or a shovelful of earth turned in actual construction. It is simply a gift of the public for the public good and there is no just reason why it should have a capitalized value for the purpose of demanding revenues thereon from the public who buy the transportation.

It is the fault of the public which places this weapon in the hands of the corporations for forcing them to pay dividends on fictitious values. In their wild scramble to tax everything in possession of the corporation they obtain a few thousands of dollars in taxes and are forced by the courts to pay dividends on this increased valuation out of the price they pay for their transportation because of the principle that all corporations are entitled to a just return upon the valuation of property employed in their And when a franchise is valued by state authorities for purposes of taxation, this value immediately attaches itself to and becomes a part of the value of the corporate property, by giving it, in addition to its right and privilege of earning a just return upon its own value, a right to earn a reasonable return upon the value of the franchise as fixed by the state authorities for taxation purposes, which may result in an increase in rates or prevent a demand for a decrease in rates which could be shown to

be unreasonable upon a proper valuation, for when the producer demands a lower rate the corporation answers that the rate is already so low that it just earns operating expenses and a reasonable return upon the value of the property.

The producer in turn states that the road of the corporation in question is worth but a certain sum per mile, stating the value of the physical property. "That may be true," states the corporation, "but you have neglected to take into consideration the value of our franchise which for taxation purposes you have valued at \$2,000,000, taking into consideration the fact that you value private property at 1-3 its actual value for taxation purposes, this would fix the value of our franchise at \$6,000,000 and the courts of the land allow us a gross earning, of 12 per cent as a reasonable return upon the valuation."

The Railroad Commission is appealed to and attempts to lower the rates when the corporation organized under the laws of another state gets out a restraining order through the United States courts and when the case comes to trial the Railroad people testify that the road is worth the real physical value plus the value of the franchise and the state authorities, having no expert testimony to the contrary, the decree is granted and the restraining order made perpetual. The State then pays the cost of the suit, and not only that, but the cost of opposing counsel, as well for the corporation attorneys' fees are turned in as operating expenses and the public pays them in the next transportation it buys.

In taxing the franchise for this valuation of \$2,000,000 the state probably gets 2 per cent on that money or \$40,000 paid in by the corporation in the form of taxes, and for the purpose of fixing rates the corporation values its franchise at \$6,000,000 and makes its rate sufficient to produce 12 per cent gross receipts on that amount or \$720,000 a balance of \$680,000 in favor of the corporation and the public has virtually paid \$720,000 in increased rates for the purpose of getting back \$40,000 in taxes.

In conclusion the author is willing to admit the more than ordinary difficulties to be encountered in a subject of such scope and over which legislators and executives have blindly stumbled in their search for equal justice to all. He will be greatly pleased to have pointed out to him the points in which he has erred and doubtless there are many; but in substantiation of his acceptance of the "inventory method" of valuation for a basis of railway

taxalion as being the fairest and most acceptable system yet devised, the following quotations are given from the leading engineering periodicals of the world as evidence of the way in which the Texas Stock and Bond Law is viewed by these authorities. The first quotation is from the Engineering News and American Railway Journal for April 23, 1896.

"As a matter of fact, after a careful examination of the last report of the Texas Railway Commission, we are constrained to believe that this bad name is undeserved. If the attitude of the State towards the railways is correctly set forth in the Commission's report, we are free to say that the position is economically and politically correct, and that other States and State Railway. Commissions can profitably study the work that has been done in Texas.

"It may be said at the outset, that the Texas Commission has attempted a task which has never been attempted before anywhere, and that is to base railway rates upon the cost of service. The position of the Commission is that the railways are entitled to charge rates high enough to return a fair rate of interest on the actual value of their property, and no higher. By value is meant not the par value of outstanding stocks and bonds, nor the amount of money which has been actually spent and charged to capital account; but it is what the entire plant of the railway company could be duplicated for at the present time.

"That this principle is a sound and safe one, and equitable to both the railways and the public, all careful students of the railway problem will generally agree. That the Texas Commission is willing to adhere to it, and carry it out impartially, the

following extract from its report bears witness:

"While it is the duty of this Commission, as far as it has the authority to do, by its rates and rulings, to protect the public against excessive freight charges, it is equally its duty to establish and maintain such rates as will secure to the railway corporations a proper return of interest on the capital invested, if the conditions of the roads with reference to population and busniess will enable it to do so. And it would not hesitate, if it should be shown to be necessary, to increase rates for this purpose. This Commission has often stated to the freight agents and Traffic managers, in its meetings with them, that if the railway companies engaged in interstate shipment would make and maintain rates which would be fairly compensatory to them on

such shipments, this Commission would do all in its power, by its rates, to secure them reasonable revenue on their railway investments in this State. And we now repeat that statement. But this suggestion contemplates good faith on both sides in the making and maintenance of rates.'

"That the principles above stated have been carrier out in practice, as far as the Commission is concerned, appears to be shown by the figures in the report; and it is stated that, not-withstanding the important reductions in freight rates (some of which were made by request of the railway companies), the returns show an increase in revenue. Rates are not always lowered by the Commission, but in some cases are as high as—or higher than— those which were in force before the railways were subject to regulation. This has been on account of the necessity of preserving rates which have long been in force on account of competition or other local conditions. These cases are quite limited in number. There has been steady increase in both gross and net earnings per mile in Texas, as compared with the equally steady increase for the whole United States.

"Under the Texas law, no bonds can be issued on any railway line for a greater amount than the actual value as determined by the Commission. Anyone familiar with the water that has been injected into the capitalization of almost every railway corporation in the country at some time in its history, through bond issues, will confess that Texas is attempting to remedy a very real and serious evil; every one will watch with interest to see what measures of success is attained in the work that she has undertaken."

The following is from "Engineering" the London Contemporary of the Engineering News:

"In Texas a Railroad Commission, with unusual powers, has been organized, through the legislative exertion of ex-Governor J. S. Hogg, and the annual report before us is interesting. Their ruling as to rates has been affirmed by the Supreme Court; but the chief point in this connection is their function in reference to the promotion of lines and the issue of bonds. Railway companies have a happy way of meeting liabilities by the issue of bonds in excess of the worth of their property, and one duty of the Commission is to value the property and franchises, and thus determine the maximum amount of bonds that may be issued. The estimate is based on the cost of construction plus a reason-

able profit to contractors. Thus 6,000 miles or so have already been valued, and the average worth is £3,185 per mile, beyond which the property cannot be bonded. With this restriction there is a greater chance of profit to the share or bond-holders. Again, the Commission has power over new railways. The route proposed is considered in the light of probable traffic, and is laid out also to involve the least difficulties. It is suggested that otherwise the interested promoter and constructor would map out the most difficult route, so that his profit on construction might be the greater. Bonds for new lines in Texas can only be authorized on the basis of the cost of constructing the road of a certain grade, with a certain kind of material, and of a certain standard of excellence to insure the minimum expense of working. The new legislation has been opposed on the plea that the effect is to discourage the construction of railways and the investment of capital in this class of security. But, as a matter of fact, the legislation, which has been in force four years, tends to encourage investment, as it insures the carrying forward of lines which have a prospect of traffic and at a fair cost of construction, discouraging speculative lines such as we have incidentally referred to. Moreover, it insures very reasonable rates of freight. It is the guarantee which is given by this legislation that is necessary to reassure the investing public in all the State railways."

